

WHAT IS CLAIMED IS:

1. An optical fiber cable comprising:

a ribbon fiber bundle formed by stacking a plurality of ribbon optical fibers, each of
5 the plurality of ribbon optical fibers comprises a plurality of optical fibers arranged in
parallel and a jacket surrounding the plurality of optical fibers;

a plurality of tension members arranged in parallel and in a close contact
relationship along a longitudinal direction of the ribbon fiber bundle; and,

an outer sheath surrounding the ribbon optical fiber bundle and the tension
10 members.

2. The optical fiber cable according to claim 1, wherein the tension members are
in contact with an intersection area between the external circumferential surfaces of the
plurality of ribbon optical fibers, defining valleys.

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3. The optical fiber cable according to claim 1, wherein the optical fiber cable has
a diameter substantially less than 3.0 mm.

4. The optical fiber cable according to claim 1, wherein the optical fiber
20 cable has a weight substantially less than 10 kg/km.

5. The optical fiber cable according to claim 1, wherein the jacket is formed of a polymeric compound.

6. The optical fiber cable according to claim 5, wherein the polymetric
5 compound is selected from a group consisting of UV-curable resin, polyvinyl chloride (PVC), Hytrel, Nylon, polyethylene (PE), polyester, and polyolefin.

7. The optical fiber cable according to claim 1, wherein the tension members
are formed from one of aramid yarn, glass yarn, glass fiber-reinforced plastic (FRP)
10 material.

8. The optical fiber cable according to claim 1, wherein the outer sheath is formed from a polymeric material.

9. The optical fiber cable according to claim 1, wherein the polymetric
15 material is selected from a group consisting of PVC, polyolefin, PE, polyamide, Polybutylene Terephthalate (PBT).

10. The optical fiber cable according to claim 1, wherein the outer sheath is
20 formed from a flame-retardant material.

11. An optical fiber cable comprising:

a ribbon fiber bundle formed by stacking a plurality of ribbon optical fibers, each of the plurality of ribbon optical fibers comprises a plurality of optical fibers arranged in parallel and a jacket surrounding the plurality of optical fibers;

5 at least one binder for binding the ribbon optical fiber bundle;

a plurality of tension members arranged in parallel and in a close contact relationship with the binders; and,

an outer sheath surrounding the ribbon optical fiber bundle, the binder, and the tension members.

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12. The optical fiber cable according to claim 11, wherein the binder is a tape made from a polymeric compound.

13. The optical fiber cable according to claim 11, wherein the optical fiber
15 cable has a diameter substantially less than 3.0 mm.

14. The optical fiber cable according to claim 11, wherein the optical fiber cable has a weight substantially less than 10 kg/km.

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